

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

To: ROBERT D BUYAN
STOUT, UXA, BUYAN & MULLINS, LLP
4 VENTURE #800
IRVINE, CA 92618

Date of Mailing
(day month year)

07 FEB 2002

Applicant's or agent's file reference

UCIVN-001PC

IMPORTANT NOTIFICATION

International application No.

PCT/US00/28049

International filing date (day/month/year)

28 AUGUST 2000

Priority Date (day/month/year)

28 AUGUST 1999

Applicant

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB 301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPPEA

Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Authorized Official

DAVID LUKTON

Telephone No. (703) 308-0196

Dorthea Lawrence For

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference UCIVN-001PC	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/23049	International filing date (day month/year) 23 AUGUST 2000	Priority date (day month/year) 23 AUGUST 1999
International Patent Classification (IPC) or national classification and IPC IPC(7): C07K 5/02 and U.S. CL: 580/331		
Applicant THE REGENTS OF THE UNIVERSITY OF CALIFORNIA		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets.
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the report
 - II ☐ Priority
 - III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☒ Certain observations on the international application

Date of submission of the demand

Date of completion of this report

Name and mailing address of the IPEA
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Authorized official
David Lorton
DAVID LORTON
Telephone No. (703) 805-0196

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. statement**

Novelty (N)

Claims	<u>1-31</u>	YES
Claims	<u>NONE</u>	NO

Inventive Step (IS)

Claims	<u>1-31</u>	YES
Claims	<u>NONE</u>	NO

Industrial Applicability (IA)

Claims	<u>1-31</u>	YES
Claims	<u>NONE</u>	NO

2. citations and explanations (Rule 70.7)

Claims 1-31 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the claimed compounds, or methods of using them.

Claims 1-31 meet the criteria for industrial applicability as defined by PCT Article 33(4).

----- NEW CITATIONS -----
NONE

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Applicants have obtained NMR data which indicates that dimerization of the claimed compounds may occur in aprotic media. From this, applicants have speculated that the claimed compounds might be useful in the treatment of cancer, by a mechanism which

involves inhibiting the activation of certain kinases that are often responsible for the incidence of neoplasia. In addition, applicants have speculated that the claimed compounds might be useful in the treatment of Huntington's Disease by a mechanism involving disrupting polyglutamine beta-sheet aggregations. In addition, applicants have speculated that the claimed compounds might be useful in the treatment of Alzheimer's Disease by a mechanism involving beta-sheet formation.

However, these are untested theories; it is not established that the proposed interactions between the claimed compounds and proteins will even occur in aqueous media in vitro, or that those interactions will be of critical importance in the progression of the named disease states. Such peptide-protein interactions are far too unpredictable to form the basis for a useful therapy, given the limited data thus far obtained.

Claims 16-22 are objected to as lacking clarity under PCT Rule 66.2(a)(v) because practice of the claimed invention is not enabled as required under PCT Rule 5.1(a) for the reasons set forth in the immediately preceding paragraph.

Claims 13-15 and 17-19 are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because the claims are indefinite. In claims 13-15, "method" lacks antecedent basis; in claims 17-19, "the disease or disorder" lacks antecedent basis.

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: ROBERT D BUYAN
STOUT, UXA, BUYAN & MULLINS, LLP
4 VENTURE #300
IRVINE, CA 92618

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION

(PCT Rule 44.1)

ROBERT D. BUYAN
NOV 20 2000

Applicant's or agent's file reference UCIVN-001PC	Date of Mailing (day/month/year) 15 NOV 2000
International application No. PCT/US00/23049	International filing date (day/month/year) 23 AUGUST 2000
Applicant THE REGENTS OF THE UNIVERSITY OF CALIFORNIA	

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith.
Filing of amendments and statement under Article 19:
 The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):
When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the international search report; however, for more details, see the notes on the accompanying sheet.
Where? Directly to the International Bureau of WIPO
 34, chemin des Colombettes
 1211 Geneva 20, Switzerland
 Facsimile No.: (41-22) 740.14.35
For more detailed instructions, see the notes on the accompanying sheet.
2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.
3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
 - ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
 - ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.
4. **Further action(s):** The applicant is reminded of the following:
 Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in rules 90 bis 1 and 90 bis 3, respectively, before the completion of the technical preparations for international publication.
 Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

are or could not be elected because they are not bound by a chapter in

Name and mailing address of the ISA US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Authorized officer

DAVID LUKTON

Telephone No. (703) 838-0166

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference UCIVN-001PC	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US00/23049	International filing date (day/month/year) 23 AUGUST 2000	(Earliest) Priority Date (day/month/year) 23 AUGUST 1999
Applicant THE REGENTS OF THE UNIVERSITY OF CALIFORNIA		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau

This international search report consists of a total of 2 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:
- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.
2. ☐ Certain claims were found unsearchable (See Box I).
3. ☐ Unity of invention is lacking (See Box II).
4. With regard to the title,
- ☐ the text is approved as submitted by the applicant.
- ☒ the text has been established by this Authority to read as follows:
COMPOUNDS USEFUL TO MIMIC PEPTIDE BETA-STRANDS
5. With regard to the abstract,
- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international

Figure 1 of the drawings is the same as the abstract.

- ☐ as suggested by the applicant.
- ☐ because the applicant failed to suggest a figure
- ☐ because this figure better characterizes the invention.

☒ None of the figures

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/23049

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07K 5/02

US CL : 530/331

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 530/331

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WEST, CAS Online

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 6,020,331 A (KAHN) 01 February 2000, see entire document.	1-31
A	US 5,618,914 A (KAHN) 08 April 1997, see entire document.	1-31

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

T

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X

document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y

document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

13 OCTOBER 2000

Date of mailing of the international search report

15 NOV 2000

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, DC 20541
Facsimile No. (703) 305-3231

Authorized officer

DAVID LUKTON

Telephone No. (703) 305-1196

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
 US Department of Commerce
 United States Patent and Trademark
 Office, PCT
 2011 South Clark Place Room
 CP2/5C24
 Arlington, VA 22202
 ETATS-UNIS D'AMERIQUE
 in its capacity as elected Office

Date of mailing (day/month/year)

07 May 2001 (07.05.01)

International application No.

PCT/US00/23049

Applicant's or agent's file reference

UCIVN-001PC

International filing date (day/month/year)

23 August 2000 (23.08.00)

Priority date (day/month/year)

23 August 1999 (23.08.99)

Applicant

NOWICK, James, S. et al

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

06 March 2001 (06.03.01)

☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
 34 chemin des Colombettes

Authorized officer

Pascal Piriou